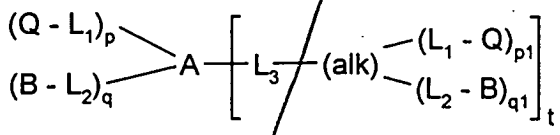
What is claimed is:

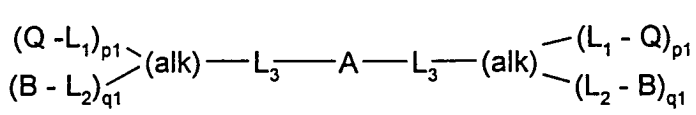
1. An amphiphilic block copolymer of formula



(1),

wherein A is a hydrophobic polysiloxane or perfluoroalkyl polyether segment;
B is a surface-modifying hydrophilic segment having a weight average molecular weight of ≥100 that is devoid of a crosslinkable group;
Q is a moiety comprising at least one crosslinkable ethylenically unsaturated group;
(alk) is C_2-C_{20}-alkylene which is unsubstituted or substituted by hydroxy;
L_1, L_2 and L_3 are each independently of the other a linking group;
p1 and q1 are each independently of the other an integer from 1 to 12; and either
t is 0 and p and q are each independently of the other an integer from 1 to 25; or
t is an integer from 1 to 8 and p and q are each 0.

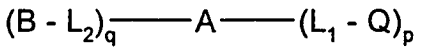
2. An amphiphilic block copolymer according to claim 1 of formula



(1a),

wherein A, B, L_1, L_2, L_3, Q, (alk), p1 and q1 are each as defined in claim 1.

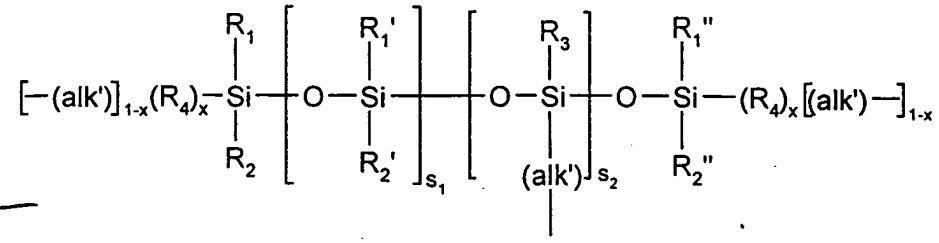
3. An amphiphilic block copolymer according to claim 1 of formula



(1b),

wherein A, B, L_1, L_2 and Q are each as defined in claim 1, and p and q are each independently of the other an integer from 2 to 20.

4. An amphiphilic block copolymer according to claim 1, wherein A is a polysiloxane segment of formula



(2),

wherein (alk') is alkylene having 1 to 20 carbon atoms which may be interrupted by -O-;

x is 0 or 1;

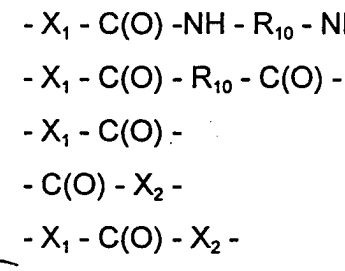
80 to 100 % of the radicals R_1, R_1', R_1'', R_2, R_2', R_2'', R_3 and R_4, independently of one another, are C_1-C_8-alkyl, and 0-20% of the radicals R_1, R_1', R_1'', R_2, R_2', R_2'', R_3 and R_4, independently of one another, are unsubstituted or C_1-C_4 alkyl- or C_1-C_4- alkoxy-substituted phenyl, fluoro(C_1-C_{18}-alkyl) or cyano(C_1-C_{12}-alkyl),

s_1 is an integer from 5 to 700;

s_2 is the sum of (p+q+t-2) if x is 0, and is the sum of (p+q+t) if x is 1; wherein p, q and t are as defined in claim 1, and

the sum (s_1+s_2) is from 5 to 700.

5. An amphiphilic block copolymer according to claim 1, wherein L_1, L_2 and L_3 are each independently of the other a bivalent linking group of formula



(4a),

(4b),

(4c),

(4d), or

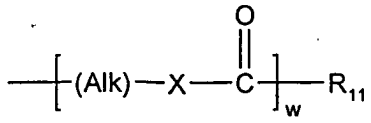
(4e),

wherein X_1 and X_2 are each independently of the other a group -O-, -S- or -NR_0-, R_0 is hydrogen or C_1-C_4-alkyl, and R_{10} is linear or branched C_1-C_{18}-alkylene or unsubstituted or C_1-C_4-alkyl- or C_1-C_4-alkoxy-substituted C_6-C_{10}-arylene, C_7-C_{18}-aralkylene, C_6-C_{10}-arylene-C_1-C_2-alkylene-C_6-C_{10}-arylene, C_3-C_8-cycloalkylene, C_3-C_8-cycloalkylene-C_1-C_6-alkylene, C_3-C_8-cycloalkylene-C_1-C_2-alkylene-C_3-C_8-cycloalkylene or C_1-C_6-alkylene-C_3-C_8-cycloalkylene-C_1-C_6-alkylene.

6. An amphiphilic block copolymer according to claim 5, wherein L_1 is a linking group of formula (4a), (4c) or (4e), L_2 is a linking group of formula (4a), and L_3 is a linking group of formula (4b) or (4c).

7. An amphiphilic block copolymer according to claim 1, wherein B is a non-ionic segment selected from the group consisting of a polyoxyalkylene, polysaccharid, polypeptide, poly(vinylpyrrolidone), polyalkylacrylate or -methacrylate, polyhydroxyalkylacrylate or -methacrylate, polyacyl alkylene imine, polyacryl amide, polyvinyl alcohol, polyvinyl ether and a polyol, or is a polyionic segment selected from the group consisting of a polyallylammonium, polyethyleneimine, polyvinylbenzyltrimethylammonium, polyaniline, sulfonated polyaniline, polypyrrole and polypyridinium segment, and a polyacrylic and polymethacrylic acid, a polythiophene-acetic acid, a polystyrenesulfonic acid and a zwitterionic segment, or a suitable salt thereof.

8. An amphiphilic block copolymer according to claim 1, wherein Q is a radical Q_1 of formula



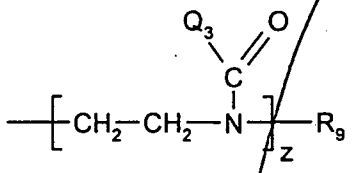
(7),

wherein (Alk) is linear or branched C_1-C_{12}-alkylene, X is -O- or -NH-, R_{11} is an olefinically unsaturated copolymerisable radical having from 2 to 24 carbon atoms which is unsubstituted or further substituted by C_1-C_4alkoxy, halogen, phenyl or carboxy, and w is the number 0 or 1.

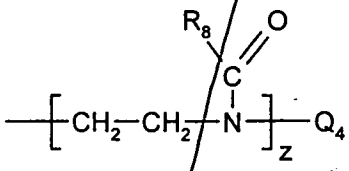
9. An amphiphilic block copolymer according to claim 1, wherein Q is a polyoxyalkylene, poly(vinylpyrrolidone), poly(hydroxyethylacrylate), poly(hydroxyethylmethacrylate), polyacrylamide, poly(N,N-dimethylacrylamide), polyacrylic acid, polymethacrylic acid, polyacyl alkylene imine or a copolymeric mixture of two or more of the above-mentioned polymers which in each case comprises one or more ethylenically unsaturated bond and has a weight average molecular weight of, for example, ≥100.

10. An amphiphilic block copolymer according to claim 9, wherein Q is a hydrophilic segment of formula

$$-((alk'')\text{-}O)_c\text{-}[(CH_2\text{-}CH_2\text{-}O)_a\text{-}(CHR_6\text{-}CHR_7\text{-}O)_b]\text{-}(alk'')\text{-}L_1'\text{-}Q_2 \qquad (5a)$$



(6a) or



(6b),

wherein L_1' is a bivalent linking group of formula

$$-X_1-C(O)-NH-R_{10}-NH-C(O)-X_2- \qquad (4a),$$

$$-X_1-C(O)-R_{10}-C(O)-X_2- \qquad (4b),$$

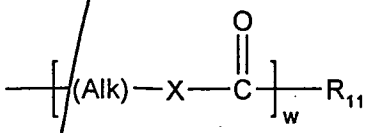
$$-X_1-C(O)- \qquad (4c),$$

$$-C(O)-X_2- \qquad (4d), \text{ or}$$

$$-X_1-C(O)-X_2- \qquad (4e),$$

wherein X_1 and X_2 are each independently of the other a group -O-, -S- or $-NR_0-$, R_0 is hydrogen or C_1-C_4-alkyl, and R_{10} is linear or branched C_1-C_{18}-alkylene or unsubstituted or C_1-C_4-alkyl- or C_1-C_4-alkoxy-substituted C_6-C_{10}-arylene, C_7-C_{18}-aralkylene, C_6-C_{10}-arylene-C_1-C_2-alkylene-C_6-C_{10}-arylene, C_3-C_8-cycloalkylene, C_3-C_8-cycloalkylene-C_1-C_6-alkylene, C_3-C_8-cycloalkylene-C_1-C_2-alkylene-C_3-C_8-cycloalkylene or C_1-C_6-alkylene-C_3-C_8-cycloalkylene-C_1-C_6-alkylene,

Q_2 is a radical of formula

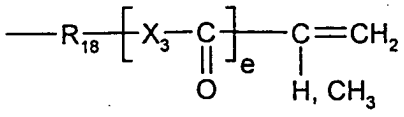


(7),

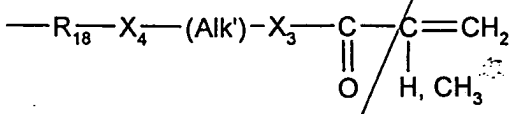
wherein (Alk) is linear or branched C_1-C_{12}-alkylene, X is -O- or -NH-, R_{11} is an olefinically unsaturated copolymerisable radical having from 2 to 24 carbon atoms which is unsubstituted or further substituted by C_1-C_4alkoxy, halogen, phenyl or carboxy, and w is the number 0 or 1,

Q_3 is C_3-C_{12}-alkenyl or a radical $-(CH_2)_{1-4}-O-R_{16}$ wherein R_{16} is acryloyl, methacryloyl or a group $-C(O)-NH-(CH_2)_{2-4}-O-C(O)-C(R_{17})=CH_2$ and R_{17} is hydrogen or methyl,

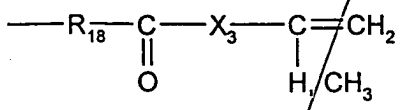
Q_4 is a radical of formula



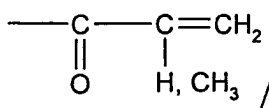
(9a),



(9b),



(9c), or



(9d),

wherein X_3 is -O- or -NR, R is hydrogen or C_1-C_4-alkyl, X_4 is a group -C(O)-O-, -O-C(O)-NH- or -NH-C(O)-O-, (Alk') is C_1-C_8-alkylene, e is an integer of 0 or 1, and R_{18} is C_1-C_{12}-alkylene, phenylene or C_7-C_{12}-phenylenealkylene,

one of the radicals R_6 and R_7 is hydrogen and the other is methyl,

(alk") is C_1-C_6-alkylene, c is the number 0 or 1, and each of a and b independently of the other is a number from 0 to 100, the sum of (a+b) being from 2 to 100,

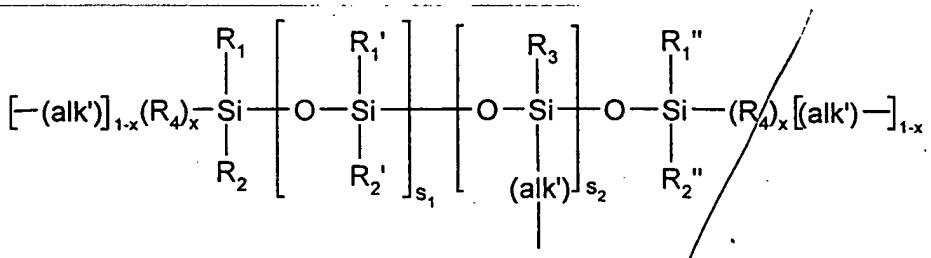
R_8 is hydrogen; C_1-C_{12}-alkyl unsubstituted or substituted by hydroxy or fluoro and/or uninterrupted or interrupted by oxygen; C_5-C_8-cycloalkyl; phenyl; or benzyl,

R_9 is C_1-C_{12}-alkyl, benzyl, C_2-C_4-alkanoyl, benzoyl or phenyl, and

z is an integer from 2 to 150.

11. An amphiphilic block copolymer according to claim 2 of formula (1a), wherein

A is a polysiloxane segment of formula



(2),

wherein x and s_2 are each 0, and R_1, R_1', R_1'', R_2, R_2', R_2'', R_3 and R_4 are each independently of one another C_1-C_4-alkyl, B is a polyoxyalkylene, poly(vinylpyrrolidone), poly(hydroxyethylacrylate), poly(hydroxyethylmethacrylate), polyacrylamide, poly(N,N-dimethylacrylamide), polyacrylic acid, polymethacrylic acid, polyacyl alkylene imine or a copolymeric mixture of two or more of the above-mentioned polymers,

L_1 is a linking group of formula

$$- X_1 - C(O) - NH - R_{10} - NH - C(O) - X_2 - \quad (4a),$$

$$- X_1 - C(O) - \quad (4c), \text{ or}$$

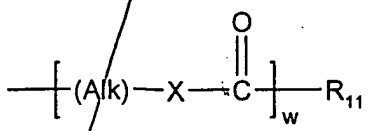
$$- X_1 - C(O) - X_2 - \quad (4e),$$

L_2 is a linking group of the above formula (4a), and L_3 is a linking group of the above formula (4c) or of the formula

$$- X_1 - C(O) - R_{10} - C(O) - X_2 - \quad (4b),$$

wherein X_1 and X_2 are each independently of the other a group -O-, -S- or $-NR_0-$, R_0 is hydrogen or C_1-C_4-alkyl, and R_{10} is linear or branched C_1-C_{18}-alkylene or unsubstituted or C_1-C_4-alkyl- or C_1-C_4-alkoxy-substituted C_6-C_{10}-arylene, C_7-C_{18}-aralkylene, C_6-C_{10}-arylene-C_1-C_2-alkylene-C_6-C_{10}-arylene, C_3-C_8-cycloalkylene, C_3-C_8-cycloalkylene-C_1-C_6-alkylene, C_3-C_8-cycloalkylene-C_1-C_2-alkylene-C_3-C_8-cycloalkylene or C_1-C_6-alkylene-C_3-C_8-cycloalkylene-C_1-C_6-alkylene,

Q is a radical Q_1 of formula



(7),

wherein (Alk) is linear or branched C_1-C_{12}-alkylene, X is -O- or -NH-, R_{11} is an olefinically unsaturated copolymerisable radical having from 2 to 24 carbon atoms which is unsubstituted or further substituted by C_1-C_4alkoxy, halogen, phenyl or carboxy, and w is the number 0 or 1, or Q

is a polyoxyalkylene, poly(vinylpyrrolidone), poly(hydroxyethylacrylate), poly(hydroxyethylmethacrylate), polyacrylamide, poly(N,N-dimethylacrylamide), polyacrylic acid, polymethacrylic acid, polyacyl alkylene imine or a copolymeric mixture of two or more of the above-mentioned polymers which in each case comprises one or more ethylenically unsaturated bond and has a weight average molecular weight of, for example, ≥100, and p1 is an integer from 1 to 6, and q1 is an integer from 1 to 8.

12. An amphiphilic block copolymer according to claim 3 of formula (1b), wherein A, B, L_1, L_2 and Q are as defined in claim 11, and p and q are each independently of the other an integer 2 to 15.

13. A process for the manufacture of a molding, which comprises crosslinking an amphiphilic block copolymer of formula (1) according to claim 1 in a mold.

14. A process according to claim 13 wherein the molding is an ophthalmic molding and wherein the block copolymer is photo-crosslinked in an ophthalmic mold using actinic radiation.

15. A molding obtained by the process according to claim 13.

16. A molding according to claim 15, which is an ophthalmic molding, intraocular lens, or artificial cornea.

17. A molding according to claim 15, which is a contact lens.